

Sefidia clasperella sp.n. from Turkey (Lepidoptera : Pyralidae, Phycitinae)

Jan ASSELBERGS

Steenbergestraat 16a, NL-4611 TE Bergen op Zoom, The Netherlands

Summary

Sefidia clasperella sp.n. is described and compared with *S. persica* Amsel, 1950. The two species differ in characters found in the male and female genitalia and male antennae.

Zusammenfassung

Sefidia clasperella sp.n. wird beschrieben und mit *Sefidia persica* Amsel, 1950 verglichen. Unterschiede an den männlichen Antennen und im männlichen und weiblichen Kopulationsorgan bieten die Möglichkeit zur Trennung der zwei Arten.

Résumé

Description de *Sefidia clasperella* sp.n. et comparaison avec *Sefidia persica* Amsel, 1950. Les deux espèces diffèrent par certains caractères des genitalia et des antennes mâles.

Introduction

In Arkiv för Zoologi (2) 1 : 235 (1950), Amsel described the species *persica*, for which he erected the genus *Sefidia*, named after the locus typicus Sine Sefid in Iran (prov. Fars). Specimens were collected by Brandt on the 1st and 2nd June 1937 at 2200 m. Most characteristic is the long clasper on the valva of the male, in Amsel's words : 'sehr ausgezeichnet durch einen langen Chitinarm der an der Basis der Valven einsetzt'. The species was treated by Roesler in the recently published 8th volume of *Microlepidoptera palaeartica* (Roesler, 1993 : 174-176, Fig. 69, pls 7, 34, 66).

In the collection of Dr. J. Lucas, Rotterdam, I found two male specimens of a phycitine close to *S. persica*, which were taken in Turkey. These differ from Amsel's species mainly in characters of the genitalia and are described here under the name *Sefidia clasperella* sp.n. Shortly

before this article was sent to the printers, a female was found in the Pyralidae material collected by M. Fibiger, Sorø, Denmark so this could also be included in the description.

Based on *S. persica*, the only species of the genus known so far, Roesler (1993 : 50,51) considered the following combination of characters typical of the genus *Sefidia* Amsel, 1950 : male antennae without a sinus, segments 4-8 each with short chitinous projection ; labial palpi pointing upwards ; maxillary palpi lacking ; transtilla absent ; cornutus absent ; long clasper on valve ; aedeagus wall with spines. Only the last of these characters does not fit with the new species, suggesting that it is a specific character only, so the new taxon would seem to be well placed in this genus.

***Sefidia clasperella* sp.n.**

HOLOTYPE : ♂ (Fig. 1) : Akşehir 1100 m, Sultandaglari, prov. Konya, Türkiye, 1-8-1981, leg. H. Coene, J. Lucas & B. v. Oorschot. G.P. 2132 Ass. In coll. ITZ, Amsterdam.

PARATYPES : ♂ : Same data as holotype, except taken 31-7- 1981. G.P. 2117 Ass. In coll. ITZ Amsterdam ; ♀ : Türkiye, prov. Mersin, 10 km SE of Arslanköy, 1300 m, 11.vii.1987, leg. M. Fibiger. In coll. Asselbergs.



Fig. 1. *Sefidia clasperella* sp.n. (holotype).

DESCRIPTION : Wingspan 22-28 mm (♂ paratype 22 mm, ♂ holotype 26 mm, ♀ paratype 28 mm). Frons whitish grey with several brown scales. Labial palps 1.5 (♀) — 1.75 diam. of eye, erect, close to frons, white at base; 2nd and 3rd segments creamy white, laterally mixed with several brown scales; 3rd segment 1/4. Maxillary palps absent. Scape twice as long as broad. Male antennae without sinus, shortly ciliate (1/6 width of shaft), segments 4-8 each with short chitinous projection. Female antennae pubescent. Patagia yellowish-grey with several brown-tipped scales. Thorax creamy white mixed with brown scales. Forewing ground colour white, more or less mixed fuscous giving a greyish appearance; antemedian line whitish, a zigzag, costal arm outwardly dark-edged; dorsal arm inwardly bordered by dark spot extending to wing base; postmedian line whitish, curved, more or less following termen, with single prominent (less so in female) inwardly pointing indentation just above dorsum, in female line not reaching costa; space between postmedian line and termen darker than midfield; discoidal dots distinct, longitudinal white streak passing between, in female also a short vertical white streak between; upper half of midfield encompassed by weak semicircle stretching from costal arm of antemedian line to postmedian line at costa; fringes greyish-white with two dark lines, some scales tipped yellowish-brown. Hindwings whitish, semihyaline, narrowly bordered light brown, slightly darker in the female; fringes pure white, yellowish-white at base, followed by light brown line.

MALE GENITALIA (Fig. 2): Vinculum slightly concave, costa of valva concave with pronounced protuberance before cucullus; clasper originating at base of valva, as long as valva itself. Uncus with rounded apex. Aedoeagus poorly sclerotised, tapered towards base, apex flat, apical third with 'granulated' appearance, cornuti absent.

FEMALE (Fig. 5): Apophyses posteriores slightly longer than apophyses anteriores. Antrum and ductus bursae rather broad; antrum strongly sclerotised, with V-shape indentation. Signum absent.

BIOLOGY : Unknown. Specimens taken mid 7-early 8. For *S. persica*, Roesler (1993) gives 5-6 and its foodplant *Colutea*.

Remarks

The male paratype is much smaller than the holotype: wingspan not quite 22 mm. It is slightly worn, but has a more brownish appearance than the holotype, rather than greyish. Characters of the wing pattern are less pronounced and the space between the postmedian line and the termen is not darker than the midfield. The male genitalia are

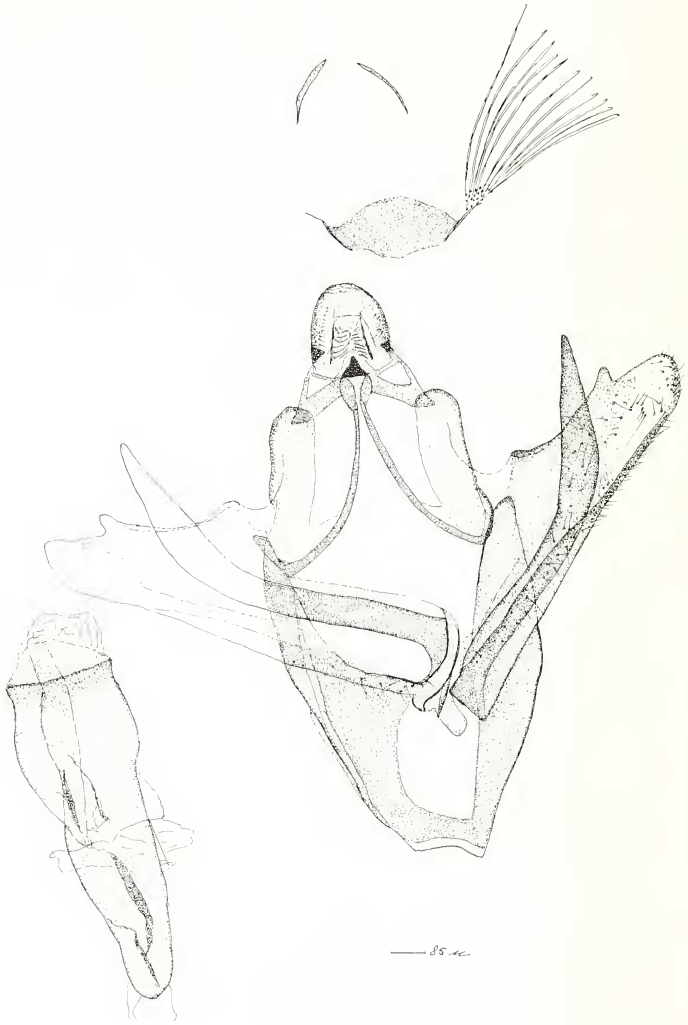


Fig. 2. ♂ genitalia of *Sefidia clasperella* sp.n. (holotype, G.P. 2132 Ass).

identical with those of the holotype. The single female specimen is also slightly worn and from a different locality, but there is nevertheless little doubt that it is conspecific with the males. The wing markings are very similar and the genitalia are clearly related to *S. persica*.

The main differences between male *S. clasperella* sp.n. and *S. persica* Amsel are given in Table 1.

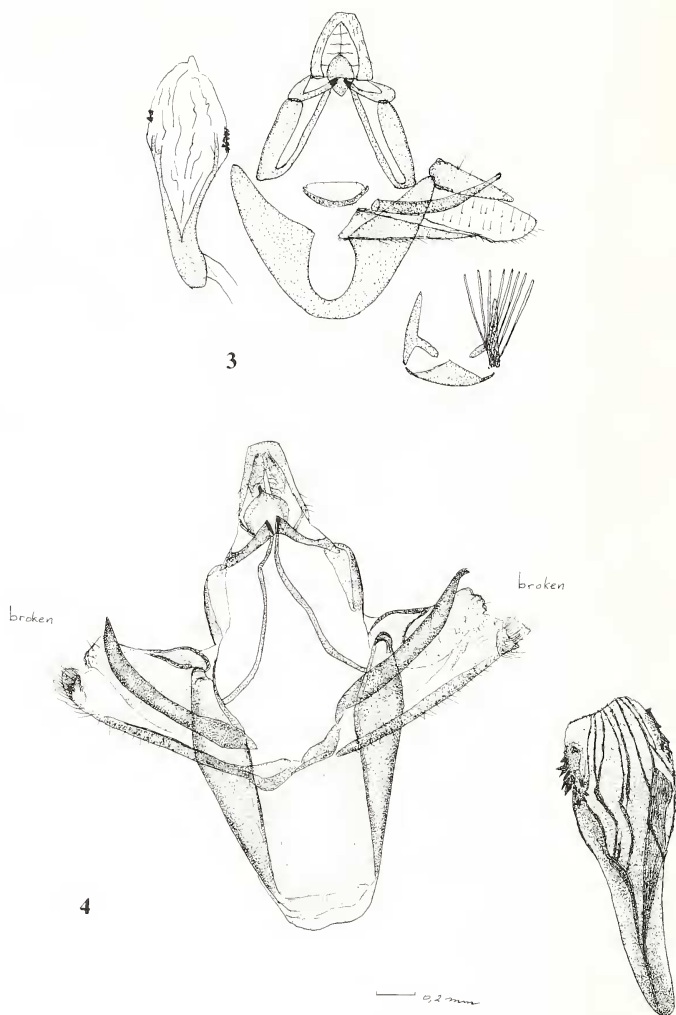
Table 1

The main differences between the males of *S. clasperella* sp.n. and *S. persica* Amsel

<i>S. clasperella</i> sp.n.	<i>S. persica</i> Amsel
Forewing : subterminal field darker or same as midfield	Forewing : subterminal field lighter than midfield, with darker scaling within costal 'semicircle'
Antennae : Cilia 1 6 width of of shaft	Antennae : Cilia 2 3 width of shaft
Uncus rounded, including apex	Uncus flattened at apex, laterally straight
Gnathos rounded with narrowed apex	Gnathos longer than broad
Clasper as long as valva	Clasper shorter
Aedoeagus with 'granulated' surface, tapered at base ; no spines	Aedoeagus markedly tapered at base, surface not 'granulated' ; numerous longitudinal striae more sclerotised ; short spines on both sides below apex
Genitalia as a whole considerably larger than in <i>persica</i>	Genitalia considerably smaller than in <i>clasperella</i>

The figure of the male genitalia of *S. persica* illustrated by Roesler (1993 : Taf. 34, Fig. 69) is rather schematic (Fig. 3) and differs somewhat from the original figure of Amsel (1950). Roesler's figure shows a vinculum with a rounded base while Amsel's figure shows it flat. Furthermore, Amsel did not draw in the anellus, whereas Roesler did. However, Roesler (1993) states that his figure is partly a reconstruction, because the genitalia were damaged. For a direct comparison with *S. clasperella*, the original Amsel slide was requested from the Naturhistoriska Riksmuseet, Stockholm (Fig. 4).

The female genitalia of *S. persica* mainly differ from *S. clasperella* in the structure of the antrum and ductus bursae. In *S. persica* they are poorly sclerotised medially and the antrum lacks the V-shaped indentation.



Figs. 3-4. ♂ genitalia of *Sefidia persica* Amsel. 3 — Paratype, after Roesler (1993); 4 — Holotype, from the original genitalia prep. of Amsel (G.U. 784a).

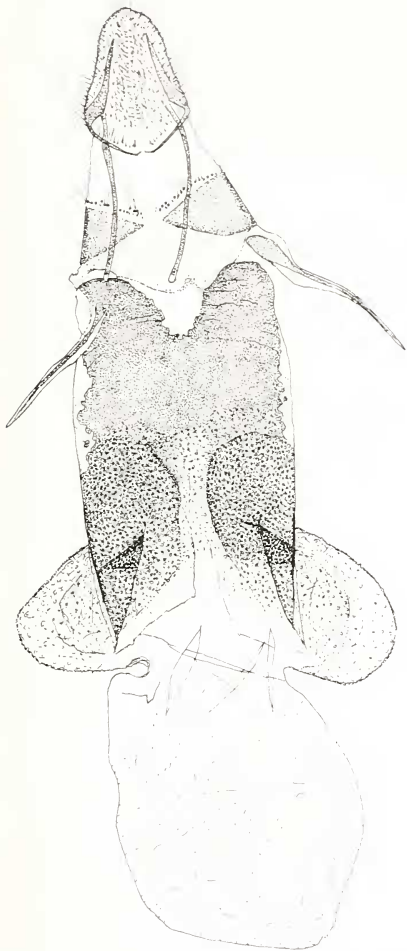


Fig. 5. ♀ genitalia of *Sefidia clasperella* sp.n. (paratype, G.P. 2857 Ass).

Conclusion

Obviously there can be variation in *S. clasperella* regarding size and degree of dark scaling. However, the male genitalia of the two specimens known so far are identical and quite different from *S. persica*. The genitalia of the single known female of *S. clasperella* also differ from those of *S. persica*. More material from diverse Turkish localities, and from Iran, would help to characterise these two species further.

Acknowledgments

The author thanks Dr. J. Lucas, Rotterdam, The Netherlands and M. Fibiger, Sorø, Denmark for allowing him to study the material, Dr. B. Gustafson, Stockholm, for the loan of the holotype of *S. persica* and S. Whitebread, Magden, Switzerland for improving the English text.

References

- AMSEL, H. G., 1950. Die Microlepidopteren der Brandt'schen Iran-Ausbeute. 2. Teil. Arkiv för Zoologi (2) 1 : 223- 257, 84 Figs.
- ROESLER, R.-U., 1993. Microlepidoptera palaeartica. 8 - Phycitinae : Quad-rifine Acrobasiina 1. Teil. I : 305 pp. ; II : 82 plates. Karlsruhe.